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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------|-------------|----------------------|---------------------|------------------|
| 10/798,930 | 03/11/2004 | Scott Fast | 0739D-000112 | 6927 |
| 27572 | 7590 | 07/01/2005 | EXAMINER | |
| HARNES, DICKEY & PIERCE, P.L.C. | | | BURNHAM, SARAH C | |
| P.O. BOX 828 | | | ART UNIT | |
| BLOOMFIELD HILLS, MI 48303 | | | PAPER NUMBER | |

3636

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|-----------------------------|--|
| Office Action Summary | Application No. 10/798,930 | Applicant(s) FAST, SCOTT | |
| | Examiner Sarah C. Burnham | Art Unit 3636 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-8, 11-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Yu (6,161,899). With respect to claims 1 and 11, Yu discloses a vehicle seat assembly (10) comprising: a seat bottom (16); a seat back (14); and a vehicle seat recliner and folding latch assembly (12), including: a lower quadrant disc (20); a slide-pin subassembly (22)(24)(86) supported on said lower quadrant disc for pivotal displacement between a first position (Figure 7) and a second position (Figure 6), said slide-pin subassembly (22)(24)(86) operable to be locked in said first and second positions; and a recliner disc (102) supported by said slide-pin subassembly (22)(24)(86) for pivotal displacement (by means of pivot pin (104)) relative thereto, wherein said recliner disc (102) includes an engagement edge (134) engaging said slide-pin subassembly (22)(24)(86) and adapted to lock said slide-pin subassembly (22)(24)(86) in said first and second positions and a void edge (136) for engaging a portion of said slide-pin assembly (22)(24)(86) when lock pin (86) is in said unlocked position .

With respect to claims 2 and 12, said slide-pin subassembly (22)(24)(86) includes a housing plate (22)(24) supporting a lock-pin (86) in an elongated slot

(92)(94), said lock pin displaceable within said slot between a locked position (Figures 6 and 7) and an unlocked position (Figure 5).

With respect to claim 3 and 13, said lower quadrant disc (20) includes a first thrust shoulder (58) adapted to unlock said slide-pin subassembly (22)(24)(86) from said first position (Figure 6) and a second thrust shoulder (62) adapted to unlock said slide-pin subassembly (22)(24)(86) from said second position (Figure 7).

With respect to claims 4 and 14, said lower quadrant disc (20) includes a cammed surface (60) disposed between said first (58) and second (62) thrust shoulders for engaging said lock pin (86) when said lock pin is in said unlocked position, as seen in Figure 5.

With respect to claims 7 and 17, the lock pin (86) is in constant engagement with said lower quadrant disc (20) as can be seen in Figures 5, 6 and 7.

With respect to claims 8 and 18, said lock pint (86) has a generally octagonal cross-section as best seen in Figure 86.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5-6, 9-10, 15-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (6,161,899) in view of Niimi et al. (US 2003/0127898). As

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disclosed above, Yu reveals all claimed elements with the exception of a recliner disc having a first locking shoulder and a second locking shoulder, a roller bearing engaging said engagement edge of said recliner disc with said slide-pin assembly and an arcuate cavity in said lower quadrant disc.

Niimi teaches the use of a roller bearing (36), a recliner disc (24) with a first engagement shoulder (25) and a second engagement shoulder (26) and an arcuate cavity (33) formed in a lower quadrant disk (32).

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to add a roller bearing (36) as taught by Niimi between the engagement edge (134) and the slide pin assembly (22)(24)(86). Such a modification would ensure a more smooth adjustment of the moving parts with respect to one another. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to modify the shape of the recliner disk (102) to have multiplied shoulders (25)(26) as taught by Niimi. Such a modification would ensure a more secure locking arrangement of the pin (86). Finally, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to include an arcuate cavity (33) as taught by Niimi in the lower quadrant disc (20) disclosed by Yu. Such a modification would allow the seat to be included to more severe angles and improve the adjustability of the seat.

5. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (6,161,899) in view of Sugimoto et al. (6,568,756). As disclosed above, Yu reveals all claimed elements with the exception of a seat pivot supporting a front side of

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said seat bottom for approximately 180 degree pivotal movement wherein said seat bottom includes a bottom surface and a top surface such that said top surface is adapted to be exposed in a seating position and said bottom surface is adapted to be exposed in a load floor position.

Sugimoto et al. teaches the use of a seat bottom (4) with a pivot (10) providing 180 degree movement wherein a top surface is facing up in a seating position as seen in is a seating position (P1) and a bottom surface is facing up in a storage load position (P2) and a bottom surface.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to provide a pivot mechanism (10), which facilitates the claimed seat bottom movement. Such a pivot mechanism ensures that the movement of the seat bottom (4) takes places in two consecutive independent movements that prevent the seat from colliding with a front seat (column 7, lines 18-20).

Response to Amendment/Arguments

6. The amendment filed on May 16, 2005 has been considered in its entirety.

Remaining issues are detailed in the sections above.

Applicant argues that the recliner disc disclosed by Yu (element (102)) is actually a cam and is not adapted to lock a slide-pin subassembly in first and second positions. The Examiner maintains that element (102) functions as a recliner arm in that the motion of element (102) causes lock pin element (86) to become unlocked from surface (58) allowing for the seat back to recline. Yu states that "biasing spring 124 biases

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handle 100 to a non-actuated position and lock cam 102 to a first position whereat an arcuate cam surface 134 on the end of lock cam 102 acts on cylindrical segment 96 of lock pin 86 for loading lock pin against the first lock surface 58" (column 4, lines 55-60). This quotation demonstrates how element (102), interpreted by the Examiner to be a recliner arm, locks the pin in position.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah C. Burnham whose telephone number is 571-272-6854. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on 571-272-6856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SCB
June 28, 2005


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